

## EYES OF NEEDLES.

Why They Never Rust Nor Cut the Very Finest, Softest Thread.

Millions of needles are sold daily. It was not so long ago when the thread in the needle was cut by the sharp edges left in the eye after manufacture. The smaller the needle the sharper the edge and the greater the annoyance to users. Then, again, the eye would rust, for a woman will dampen the end of the thread on her tongue in order to make a point so that the needle may be threaded more easily. Complaint was loud and long, and orders were passed down the line to produce an eye in the smallest needle that could not cut the finest and softest thread in the world.

This was done by inventing a new machine in the shape of die cutters for the making of the eyes. The points on these minute augers are so small that they cannot be seen with the naked eye or detected by the most delicate sense of touch. A microscope is necessary. So it was essential to invent new machines to manufacture the dies and to sharpen the tiny drills.

Polishers and burnishers had to be made that would finish off every rough edge in an instant almost because needles sell a dozen or so for a few cents. When this was done the needles were placed in a rack, through which the eyes projected and held so tightly that when immersed in water only the eyes were covered. In this way the heads of the needles became the negative pole of a powerful battery, and in a few moments the eyes of several million needles were gold plated and hence rendered rust proof.—Harper's.

## DAMP, DARK DAYS.

And Their Depressing Effects Upon the Human System.

Next time it is a dark, dreary day and you are sure that you have some really terrible ailment don't worry. Just cheer up and realize that there is nothing the matter with you except that the weather is damp, and the first sunny day will be sure to set you right.

At least this is the opinion of Dr. Rankin, a London physician, who has been giving lectures on the subject of health and happiness. He attributes most of the ordinary woes of humanity to the damp weather and explains his theory scientifically.

"In damp weather," he says, "the skin does not perform its functions properly. Products which should be thrown off in perspiration remain and clog the skin. Under ordinary circumstances in a normal temperature the amount of vapor passing from the skin reaches thirty ounces per day. In moist air the amount passing out from the skin is reduced to seven or eight ounces.

"As perspiration contains poisonous properties, it is not surprising that during damp weather these poisonous properties which are retained in the body lower the vitality and produce various temporary ailments."

So it's really a comfort to know that when it does not feel "well" in damp weather it is no sign of constitutional ill health, but just the weather.—San Francisco Chronicle.

## Castle Garden.

Castle Garden was built by the United States in 1807 from the plans of Lieutenant Colonel Jonathan Williams, C. E., and was called Fort Clinton. In 1822 it was ceded to New York city. In 1824 it became a place of amusement and about 1826 got the name of Castle Garden. In 1845 there were Ethiopian minstrels there, in 1847-9 theatrical companies played there, and in 1850 Jenny Lind sang there. In 1855 it was closed as a place of amusement, and the commissioners of immigration took it as an immigrant depot. In 1870 it suffered from fire, and on July 9, 1876, it was burned to the ground. It was rebuilt at once. In 1892 the depot was moved to Ellis Island, and Castle Garden reverted to the city, which in 1893 opened an aquarium there.

## When Father Sings.

Little Mildred lives on the Kansas side and is four years old. She has a good voice and likes to sing. Her father has a very poor voice and wouldn't carry a tune on his shoulders. He is aware of his failing. So is Mildred. Whenever he starts to sing the rasping noise greets on her sensitive loving ears, and whenever Mildred is naughty father threatens her thus:

"Mildred, if you don't behave papa will sing."

Mildred immediately turns up her nose, puts her hands behind her back and walks away. But she always behaves.—Kansas City Star.

## The Hens Were Jealous.

"My dear," said the professor's wife, "the hens have scratched up all that eggplant seed you sowed."

"Ah, jealousy!" mused the professor. And he sat down and wrote a twenty page article on the "Development of Envy in the Minds of the Lower Birds."—Ladies' Home Journal.

## A Handy Woman.

Mrs. Housewife—I never had a handress who could do up white dresses as nicely as your wife does. Rastus (grinning admiringly)—Ya's 'm. Mandy's a right handy 'oman. She kin do me up jes' as easy as one o' dem air dresses.—Puck.

## Made It Clear.

Mrs. Youngbride (to grocer)—Shall I open an account, or do you prefer to have me pay for what I get? Grocer—Both, madam.—Boston Transcript.

Making a friend laugh is often the best help we can give him.

## FOUND ITS GOLDEN HEAD.

Riddle of a Marble Column in Italy Read by a Beggar.

Near the monastery of San Vito, in Naples, stood a marble column that had been erected by an eccentric Frenchman about the beginning of the last century. On it were written in French the following enigmatic words: "On May 1 every year I have a golden head."

The inscription sorely puzzled the inhabitants of Naples. On May 1 the year after the erection of the column a great crowd came to it in the hope of finding the top covered with gold pieces. Needless to say, they went home with their pockets as empty as they were when they came.

For several years people came to see the promised wonder and went away disappointed. At last the authorities had the column taken down in the belief that treasure would be found beneath it. Nothing but earth was found, and so the column was set up again. Obviously the words had a mystic meaning, but no one was clever enough to guess it, and for years the riddle remained unsolved.

Finally in 1841 a ragged beggar named Annibale Tosci noticed the inscription. He stood looking at it for a long time while he pondered its meaning. Then suddenly the solution of the puzzle flashed into his mind. He waited patiently until May 1 before he tested the accuracy of his interpretation of the mystic words.

On the day mentioned in the inscription Tosci, bearing a pick and shovel, set out at daybreak for the column. He arrived before any chance visitors, and as soon as the monastery's bells tolled 6 he started digging in the ground covered by the shadow of the top of the column. He had not dug long before he came on a satchel that contained 80,000 francs. The inscription was a true one—the head of the column covered the golden treasure every year on May 1.

Annibale Tosci, the beggar whose sharp guess had given him comparative wealth, became a landowner near Mantua. He died at the age of ninety-four.—Youth's Companion.

## HISTORIC RAILROAD TRIP.

Fillmore and Webster on the Erie's First Through Train.

The completion of the Erie was the most important event in the history of railroad building down to that time—a matter of national consequence. Recognition of this fact was made when in May, 1851, a special train carried on a two days' trip through the mountains and valleys of southern New York, sweet with the leaves and blossoms of early summer, President Fillmore, four members of his cabinet and other guests of national distinction.

Daniel Webster, majestic even under his heavy burden of age and ill health, was secretary of state in Fillmore's cabinet and rode on that first through train. He made the journey in a rocking chair lashed to a flat car that he might lose nothing of the scenery and the sweetness of the fresh verdure. Nor was he too feeble to enjoy the great barbecue at Dunkirk, where often and sheep were roasted whole, pork and beans were cooked in vessels holding fifty gallons each, bread was baked in loaves ten feet long and two feet thick, so heavy that two men staggered under their burden, and the whole was served at a table 300 feet long, spread under a specially built shed along Railroad street from Deer to Lion street.

It was a great day for Dunkirk; it was a great day for New York state and the nation, and it was a great day also for President Fillmore, who found the pork and beans especially to his taste.—Wells Fargo Messenger.

## Soaking the Clothes.

Mrs. Browning had a new domestic named Agnes.

"Agnes," said the mistress, "did you put the clothes in soak?"

"Oh did not," answered the girl. "Did you want me to, mum?"

"Why, certainly," was the reply.

"Very well, mum," said Agnes.

About two hours later Agnes presented herself to her mistress.

"Oh hev put thim clothes in soak, mum," she said, "but the pawnbroker wud give me only chev dollars on the whole outfit. Here be th' money, an' it's sorry Oi am that ye bees so harrowd up."—Harper's Magazine.

## "Sapsy."

"At Liverpool street station, London," said an American, "I asked a booking clerk whether he could tell me where Sapsworth was. His answer was that he had never heard of such a place."

"But," I urged, "is not that the way the country people pronounce Sawbridgeworth?" "No, indeed," he laughingly replied. "They call it Sapsy."

## Kipling's Response.

The Cantab, the Cambridge university weekly, once asked Rudyard Kipling to contribute to its columns. In response came the following reply:

There once was a writer who wrote, "Dear Sir—In reply to your note of yesterday's date."

I am sorry to state it's no good at the prices you quote."

## Gymnastic Stunt.

Barbour—You seem warm. Have you been exercising? Waterman—Yes, indeed. I went to the mutes' dance and swung dumb bells around all evening.—Michigan Gargoyle.

## Meteorological.

Wallie—When I called on Zella last eve she acted toward me like a weather forecast. Wardie—How was that? Wallie—Fair and very cool.—Kansas City Star.

## BIRDS AND COLORS.

Pigeons and Chickens Can See What Is Invisible to Man.

It has been slowly brought to our understanding that the world is not the same to all creatures, and probably no experiments have tended more to make this clear than those on the color sense of chickens, pigeons, owls and kestrels.

Hungry chickens and pigeons were first kept an hour in a bright room for them to become accustomed to the light. The floor was then spread with a smooth black cloth, evenly covered with grains of wheat, a strong spectrum was thrown on it from the ceiling and the hungry animals were turned loose. They picked the wheat first from the bright red, then the ultra red, next the yellow and finally the green. They touched nothing in the blue and violet because they saw nothing; but, on the other hand, they saw the grains in the ultra red that were invisible to the men.

This proved that for chickens and pigeons the spectrum is shortened at the violet end of short wave length and extended at the red end of long wave length. This is the effect one might expect from wearing orange colored glasses and demonstrated that fowls see through such spectacles in the form of yellow and orange oil globules embedded in the light sensitive layer.

To kestrels and buzzards the brightest zone was the green instead of the red, the blue being visible. To owls the colors were as men see them.—London Mail.

## HUNS AND MAGYARS.

Legend Says Nimrod, Noah's Grandson, Founded the Race.

Among the many interesting bits of history which are included in "Old Homes of New Americans," Dr. Francis E. Clark's study of the original life and surroundings of our immigrants, is a brief account of the traditional origin of the Huns and Magyars.

According to this story, Nimrod, grandson of Noah, was the founder of the race. His wife, Eneh, bore him two sons, Hunyor and Magyar. These two brothers—who were great hunters like their father, who has given his name to every expert user of the arrow, spear and gun since his day—while chasing a doe in the forests of the Caucasus, were led to move westward and found a country rich in fertile meadows and green fields.

The doe vanished from before their eyes, for she had evidently been invented by the mythmakers to lead the brothers into their new domain, and afterward, we are told, the progeny of Hunyor settled beyond the Volga, while the sons and grandsons of Magyar settled about the river Don and were known thereafter as Don-Magyars.

However much or however little true history is found in this maze of myths, the names have persisted through all the centuries. The Huns devastated Europe in the early centuries, and "Magyar" is still the most honored name by which the people of Hungary choose to be known.

## To See the Back of Your Eye.

Behind the eye, what is called the retina, is lined with branching blood vessels, and a curious but perfectly simple experiment will enable you to see these. Place yourself in a dark room, opposite a dark colored wall; then light a candle and, holding it in your hand, move it up and down before your eyes, all the time looking not at the candle, but at the wall beyond. After a little practice you will see appear on the wall a great branching figure in black on a reddish surface. What you are looking at is the shadow of these blood vessels at the back of your own eye. Perhaps the most curious part of the whole thing is that the part of the eye which receives the impression of light must lie behind these blood vessels.—London Graphic.

## Cured Her.

There is always a way out if one seeks in the proper direction. How the lady of the house put a stop to a telephone caller who annoyed her is told in the New York Sun: "A busy housewife on the west side had been called to the telephone every day for two weeks by some person who inquired if that was the meat market. It seemed impossible to straighten out the phone numbers. The housewife became angry. So the other day when called she admitted that it was the meat market and very pleasantly took a rush order for a dozen lamb chops. She hasn't been bothered since."

## A Disadvantage.

"It is impossible to get a fair estimate of the output of the American hen."

"Why is it impossible to get a fair record?"

"Because, no matter how you fix it, the record is bound to be a fowl one."—Baltimore American.

## Path of Least Resistance.

"Do you believe in telepathy?"

"Yes."

"Have you had any experience in that line?"

"No. But I'd rather say I believe it than invite some enthusiast on the subject to give me an argument about it."—Washington Star.

## A Worse Fall.

Young Man—My cousin has very long hair. When she undoes it it falls down to her waist. His Sweetheart—Indeed? Her Kid Brother—That's nothing. When you undo your hair it falls to the floor, don't it, Mary?—London Telegraph.

## ANCIENT SECRETS.

Priceless Recipes That Are Now Lost to the World.

## COLORS OF THE OLD MASTERS.

They Are the Envy and the Despair of Modern Artists, to Whom Their Composition Is a Mystery—Greek Fire and Roman Mortar.

Numerous are the trade secrets handed down generation by generation from father to son, and vast is the capital made out of some of them in the commercial world of today.

Particularly, perhaps, is this the case among the numerous manufacturers of piquant sauces and the countless vendors of patent medicines.

But there is also, it must be remembered, another side to the case. Many, alas, are the priceless trade secrets buried far down below the moldering dust of the misty past and lost to the world, perchance never again to be recovered.

To cite the first example that occurs to the mind of the writer, for instance, that would a Royal academician of the present day give to be possessed of the secret held by the old masters—Raphael, Rubens, Correggio, Van Dyck and their contemporaries—for mixing their colors so as to render them imperishable and impervious to the ravage of time?

The red colors especially of these artists of a bygone epoch are every whit as bright now as they were three long centuries ago. On the contrary, the colors of pictures painted only 100 years ago have lost their luster and are faded and decayed to a deplorable extent.

Again, in the world of music, the manufacturers of violins—old masters, as one may justifiably term them, in another branch of art—treasured a recipe for a varnish that sank into the wood of their incomparable instruments and mellowed it as well as preserved it.

With such extreme, relentless jealousy, however, did they guard their great secret that it, too, is lost, to all appearances, irretrievably.

Rather more than 100 years ago there lived in a quaint, old world village in Wales a working blacksmith who had managed by some means or other to bring the welding of steel to such a pitch of perfection that the joint was absolutely invisible and the temper of the steel as fine as on the day it left the taster's hands. By his process he was able to join the very finest of sword blades, and after he had finished with them they were absolutely as good and as sound as when they had left the factory.

The blacksmith's fame spread far and wide, and, naturally enough, he attained a great reputation, but he made a point of invariably working in solitude. He was offered large and tempting sums to divulge his secret, but kept it obstinately to himself, and when his span of life had run its course he took it with him to another world.

The ancient Greeks had a substance which we call Greek fire and which they used in naval warfare.

Their method of employing it was simply this—to throw the substance upon the surface of the water, where it flamed up and set fire to the ships of the enemy. What was it?

The only known substance of the present day that would do this is the metal potassium, but to set fire to a ship in the manner described would necessitate the use of at least half a ton of the metal. Where did the Greeks obtain the substance they used with such effect? Or how did they make it? If Greek fire was potassium the secret of the process is another that must be numbered with the lost.

The man who could disinter the buried recipe for Roman mortar would be bowed down to and worshiped by the builders of the present day. How they made it is a profound secret and bids fair to remain so.

The mortar is as firm now as it was 2,000 years ago. It has calmly scoffed at the ravages of time and weather.

The above are but a few—a very few—of the lost and buried secrets of antiquity which modern scientists and mechanicians would give much to learn.—London Answers.

## That Held Him.

One of the young men in the boarding house had the double fault of slowness in paying his bill and fussiness about the table service. One morning he said peevishly to the landlady, "Mrs. Jones, will you tell me why my napkin is so damp?"

"Yes, Mr. Wicks," replied the landlady promptly. "It's because there is so much dew on your board."—Brooklyn Times.

## Close.

"You say he is stingy?"

"Stingy? I should say he was stingy. He never tipped a waiter but once in his life. It was on his wedding tour, and the twilight gave the waiter 10 cents and asked for a receipt."—Chicago Tribune.

## Authoritative.

"So you are going to leave your studio?"

"Leave? No. Who told you so?"

"Your landlord."—Philadelphia Inquirer.

The most important attribute of man as a moral being is the faculty of self control.

## TIPPING AN ARTIST.

He Got His Fee, Too, Before He Gave Up the Information Wanted.

Winslow Homer was a great painter who had the unusual good fortune to have his merit appreciated early in life. But no one ever presumed less on a wide reputation. Affectation was a weakness from which his sense of humor saved him.

In his biography by Mr. W. B. Downes is printed the story of a New York gentleman of wealth and artistic tastes who made the journey to Scarborough, Me., where Homer had his studio, to make the artist's acquaintance.

On his arrival he tested the studio door locked. The owner was nowhere to be seen. He wandered about the cliffs for awhile until he met a man in a rough old suit of clothes, rubber boots and a battered hat, who carried a fishpole. He accosted the fisherman thus:

"Say, my man, if you can tell me where I can find Winslow Homer I have a quarter for you."

"Where's your quarter?" said the fisherman.

He handed it over and was astounded to hear the quizzical Yankee fisherman say, "I am Winslow Homer."

The sequel of this unusual introduction was that Homer took his new acquaintance back to the studio, entertained him and before he left sold him a picture.

## LIGHTING WITH GAS.

And the Young Scotsman Who Wore a Wooden Hat.

One morning a good many years ago a young Scotsman was shown into the office of a great engineer at Birmingham. The young man was wearing a hat of extraordinary shape, and in his nervousness at meeting the man of fame he let the hat slip. It fell with a hollow thud upon the floor. The engineer looked with astonishment at the thing. The owner picked it up and apologized for the noise it had caused. It was of wood, he explained. He had made it himself, turning it with his father's lathe.

The engineer thought that there must be something in a man who could think out and make such a thing as this. He forthwith engaged him, kept an eye upon him and gave him work of responsibility. The engineer was Boulton; the new man, William Murdoch.

The man with the wooden hat justified the judgment of the man who employed him. After awhile he was sent away to Cornwall, and when he returned it was to light up his master's premises with gas. The mind which first practically applied the coal gas to the purpose of lighting lived inside that wooden hat.—St. James' Gazette.

## Leigh Hunt.

This famous Englishman has two distinct claims to fame. Not only was he a brilliant poet, essayist and critic, but much that we know of Keats, Shelley, Lamb, Byron, Moore, Coleridge, Dickens and Carlyle has been derived from the knowledge of these celebrities which Hunt gave to the world. Possessing a happy spirit and genuine scholarship, Leigh Hunt's writings sparkle with wit and cleverness, while his translations are among the choicest of their kind. His peculiar difficulties undoubtedly prevented Hunt giving us his best at times, but after he was granted a pension amounting in all to £220 per annum the improved comfort and augmented leisure enabled him to make his mark on English literature with essays of remarkable power.—Pearson's Weekly.

## The Name Lehigh.

On March 6, 1812, Lehigh county was formed from part of Northampton county. Its name came from the Lehigh river, being an Indian name derived through the German. The original Indian name is said to have been Le-chau-weech-ink, or Le-chau-weech-i, meaning "the place of the fork of the road." The German settlers of the region shortened this into "Lecha," which is still in use among the Pennsylvania Germans. "Lehigh" is the English version of "Lecha." Allentown, the county seat, was called Northampton until 1838.—Philadelphia Record.

## Applied Advice.

"I want to buy one of those 'Do It Now' cards."

"Sorry," said the clerk, "but we're out of those cards. We'll have some printed next week."

"You told me that last week."

At this point the proprietor came forward.

"Print some immediately," he ordered, "and tack up about forty of 'em around here."—Louisville Courier-Journal.

## A Little Oversight.

Minister (approaching the baptismal font)—The candidate for baptism will now be presented. Mother of Intended Candidate (in horrified undertone to husband)—There. I knew we would forget something. You run home as quick as you can and fetch the baby!—Dallas News.

## The Other Kind.

Pater (to indolent son)—Why don't you go to work? You have attained your majority.

Son—Yes, dad. But mine isn't a working majority.—Boston Transcript.

## Knew What She Wanted.

"But, my dear madam, there's no use consulting me about your husband. I'm a horse doctor."

"That's why I came to you. He's a chronic kicker."—Life.

## GLASS IS PECULIAR.

It Has a Number of Curious and Contradictory Qualities.

Glass is one of the most interesting as well as one of the most peculiar things in the world. It has curious and contradictory qualities, and many astonishing phenomena are connected with it. Brittle and breakable as it is, yet it exceeds almost all other bodies in elasticity.

If two glass balls are made to strike each other at a given force the recoil, by virtue of their elasticity, will be nearly equal to their original impetus. Connected with its brittleness are some very singular facts.

Take a hollow sphere with a hole and stop the hole with the finger, so as to prevent the external and internal air from communicating, and the sphere will fly to pieces by the mere heat of the hand. Vessels made of glass that have been suddenly cooled possess the curious property of being able to resist hard blows given to them from without, but will be instantly shattered by a small particle of flint dropped into their cavities. This property seems to depend upon the comparative thickness of the bottom; the thicker the bottom is the more certainty of breakage by this experiment. Some of these vessels, it is stated, have resisted the stroke of a mallet given with sufficient force to drive a nail into wood, and heavy bodies, such as iron, bits of wood, Jasper stone, etc., have been cast into them from a height of two or three feet without any effect, yet a fragment of flint not larger than a pea dropped from a height of three inches has made them fly.

## ELIZA WAS GENEROUS.

Her Munificent Offer For an Original Five Act Tragedy.

People are likely to look back with misanthropy upon the past in these days of modern progress. When we hear what the most prolific of present day novelists receives a word and what the weekly royalties of any well known playwrights are we say that the literary profession has come into its own. Some hark back to the contrasting tale—that Milton received only £5 for the first copyright of "Paradise Lost," an epic in twelve books containing a total of 10,565 lines, but that was over two centuries ago. Poe received \$10 for "The Raven." That may be dismissed with the statement that poetry never paid.

The modern way of making money by literature is even more recent than is generally thought. Alexander Hill of Cincinnati, one of the best known bookmen and collectors of the middle west, has a letter in his collection of autographs that proves this point.

Two generations ago Eliza Logan was a leading actress in America. Read her letter. O budding genius of the typewriter, and be glad that where you are paid it is space rates for that local paper:

Tremont House, Boston, May 17, 1840. E. Dussault, Jr., Charlestown, Mass. Sir—I wish an original five act tragedy—the feature to be a heroine, myself the personator of it; the scene not to be laid in this country; the plot to be original with the author—for which, if I like it, I will pay \$5. Respectfully,

ELIZA LOGAN.

—Boston Post.

## American Leaf Colors.

It has been observed that the leaves of American trees, such as maples, scarlet oaks and so forth, which at home exhibit splendid colors in the autumn, fall below their reputation in this regard when transplanted in England or on the continent of Europe.

An English observer, who has been studying the causes of the autumn tints of trees, thinks the superiority of our woodlands arises from the soft and mild yet glowing climatic conditions prevailing here in the fall. England, it is added, is rarely blessed with an Indian summer. When the climatic conditions permit the leaves to retain considerable vitality in the autumn, the colored pigment is normally developed; hence the glorious forests of the United States.—Chicago Record-Herald.

## Regulating Price of Books.

The price of books was once a matter for legislation in England. An act of 1534, which seems never to have been repealed, provides that any complaint regarding the price of books should be considered by "the lord chamberlain, the lord treasurer and the justices or any two of these, and that those dignitaries should have power and authority to reform and redress the enhancing of the prices of printed books and to limit the prices of the books and the offenders should lose and forfeit for every book by them sold whereof the price be enhanced the sum of 3s. 6d."—London Mail.

## She Didn't Do It.

The family far waxed fierce. "You talk about my being to blame for our marrying?" shrilly exclaimed Mrs. Vick-Senn. "John Henry, did I hunt you out and then make love to you?"

"No," he snorted. "But you could have given me the glassy eye and sent me about my business, and you didn't do it, madam—you didn't do it!"—Chicago Tribune.

## Capital Punishment.

"Mamma, did